What is claimed is:

1. A simulated steering assembly comprising:

a flexible polymer steering column shaft having a fixed end and a free rotational end; and

a control feature in communication with said free rotational end.

2. A simulated steering assembly as described in claim 1 wherein said control feature is a steering wheel.

3. A simulated steering assembly as described in claim 1 further comprising:

an electroactive assembly in communication with said flexible polymer steering column shaft; and

a control module in electronic communication with said electroactive assembly.

4. A simulated steering system assembly as described in claim 3 wherein said electroactive assembly comprises at least one sensor.

5. A simulated steering system assembly as described in claim 3 wherein said electroactive assembly comprises at least one piezoceramic device.

6. A simulated steering assembly as described in claim 3 wherein said electroactive assembly can adjust the modulus of said flexible polymer steering column shaft.

7. A simulated steering assembly as described in claim 3 wherein said electroactive assembly imparts road feel on said flexible polymer steering column shaft.

8. A simulated steering assembly as described in claim 3 wherein said electroactive assembly is embedded in said flexible polymer steering column shaft.

9. A simulated steering assembly comprising:

a flexible polymer steering column shaft having a fixed end and a rotationally free end;

a steering wheel in communication with said rotationally free end; and

an electroactive assembly in communication with said flexible polymer steering column shaft.

10. A simulated steering assembly as described in claim 9 further comprising:

steering mechanisms; and

a control module in electronic communication with said electroactive assembly and controlling said steering mechanisms in response to signals from said electroactive assembly.

11. A simulated steering assembly as described in claim 9 wherein said electroactive assembly comprises at least one sensor.

12. A simulated steering assembly as described in claim 9 wherein said electroactive assembly comprises at least one piezoceramic device.

13. A simulated steering assembly as described in claim 9 further comprising:

at least one guide element in communication with said flexible polymer steering column shaft and minimizing non-rotational deflections of said flexible polymer steering column shaft.

14. A simulated steering assembly as described in claim 9 wherein said electroactive assembly can adjust the modulus of said flexible polymer steering column shaft.

15. A simulated steering assembly as described in claim 9 wherein said at least one sensor element senses a degree of twist of said flexible polymer steering column shaft.

16. A simulated steering assembly as described in claim 9 wherein said electroactive assembly imparts road feel on said flexible polymer steering column shaft.

17 A method of controlling a steer-by-wire assembly utilizing a control feature and a flexible polymer steering column shaft having a fixed end and a free rotational end comprising;

rotating the free rotational end in response to a driver moving said control feature;

measuring the rotation of the flexible polymer steering column shaft using an electroactive assembly in communication with said flexible polymer steering column shaft; and

activating a steering mechanism in response to said electroactive assembly.

18. A method as described in claim 17 further comprising:

adjusting the modulus of said flexible polymer steering column shaft utilizing said electroactive assembly to provide feedback to said driver.

19. A method as described in claim 17 further comprising:

removing modal resonances of said flexible polymer steering column shaft utilizing said electroactive assembly.

20. A method as described in claim 17 wherein said electroactive assembly includes a solid polymer composite bundle embedded in said flexible polymer steering column shaft.